

YEAR OF CLEAN WATER

Water Education Drops

Source Water Protection

Source water is water from streams, rivers, lakes, or underground aquifers which is used to supply private wells and public drinking water. Virtually every stream, lake, river and aquifer in this country is used as a drinking water source. Protecting these source waters from contaminants is a major national priority in protecting public health through ensuring a clean, safe drinking water supply. Reducing the threat of waterborne illnesses helps save hundreds of millions of dollars annually by eliminating costly health care expenses, lost wages, work absences, decreased job productivity, and additional treatment costs incurred by public water systems required to meet federal drinking water quality standards.

The Source Water Protection Program, strengthened by the 1996 Amendments to the Safe Drinking Water Act (SDWA), outlines a comprehensive plan to achieve maximum public health protection. According to the plan, it is essential that communities take these six steps:

- delineate the drinking water source protection area;
- inventory known and potential sources of contamination within these areas;
- determine the susceptibility of the water supply system to these contaminants;
- notify and involve the public about threats identified in the contaminant source inventory and what they mean to their public water supply;
- implement management measures to prevent, reduce, or eliminate threats;
- develop contingency planning strategies to deal with water supply contamination or service interruption emergencies.

Questions:

1. Name the main source of EPA Region III's office building drinking water.
2. Give some characteristics of the entire Schuylkill River Watershed.
3. How many surface water intakes are in the Schuylkill River?
4. What are some of the major pollutants in the Schuylkill watershed?

- 5. How has EPA Region III staff recently helped protect our source of drinking water in the Schuylkill River?**
- 6. How much Drinking Water State Revolving Funds (for a description of DWSRF - see Week 9 of the Water Drops) have been spent on Schuylkill River source water assessments?**
- 7. How much DWSRF have been spent on Schuylkill and Lower Delaware River early warning signs?**

Answers:

- 1. Name one source of EPA's Region III's office building drinking water.**

A. The Schuylkill River Watershed. (At times, water could come from the Delaware River)

- 2. Give some characteristics of the Schuylkill River Watershed.**

A. It is 130 miles long. The watershed includes 2,000 square miles of area and is home to approximately three million people in Pennsylvania, and is currently considered to be: 47 percent forest, 36 percent agricultural, 13 percent developed.

- 3. How many surface water intakes are in the Schuylkill River?**

A. 58 surface water intakes

- 4. What are some of the major pollutants in the Schuylkill watershed?**

A. Pathogens, such as Giardia and Cryptosporidium, are contained in sewage, livestock and wildlife wastes; nutrients resulting from sewage, agriculture, lawncare and golf courses; metals created by acid mine drainage; chloride and sodium from highways and road salt; pesticides and herbicides in lawncare and agriculture practices; MtBE (a gasoline additive) leaked from underground storage tanks and watercrafts; and natural elements in the river such as bromide that can chemically react with other elements to create potentially cancer-causing compounds.

- 5. How has EPA Region III staff recently helped protect our source of drinking water in the Schuylkill River?**

A. EPA Region III staff worked on the Belmont Goose Project, installing fences, vegetation and signage along the river where Canada Geese were found. The number

of geese in the project area has been reduced by almost 80 percent. The project area has been restored from a barren ground to a thriving green area.

6. How much Drinking Water State Revolving Funds (for a description of SRF - see week 9 of the Water Drops) have been spent on Schuylkill River source water assessments?

A. \$402,500

7. How much DWSRF have been spent on Schuylkill and Lower Delaware River early warning signs?

A. \$725,000

For further information, go to:

<http://www.epa.gov/safewater/protect/swap.html>

For source water assessment programs

and

<http://www.epa.gov/safewater/protect.html>

for source water protection

Or call Andrea Bennett at 215 814-5736

or Steve Maslowski at 215-814-2371